AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1 (previously presented). An image forming apparatus, comprising:

an image former that forms and holds an unfixed toner image on a recording medium fed to an image forming area; and

a heat-fixing apparatus that heats the recording medium transported from the image forming area in a predetermined fixing area and heats the unfixed toner image onto the recording medium; wherein

said heat-fixing apparatus comprising:

an image heating body that heats the unfixed toner image on the recording medium;

a heat-producer that heats said image heating body;

a temperature sensor that detects a temperature of said image heating body; and

a calorific value controller that controls a calorific value of said heat-producer based on the temperature detected by said temperature sensor so that the temperature of said image heating body is maintained at an image fixing temperature suitable for heat-fixing the unfixed toner image onto the recording medium; and

said image forming apparatus has an image forming operation controller that controls an image forming operation of said image former so that heat-fixing of the unfixed toner image onto the recording medium is started a predetermined timing before the temperature detected by said temperature sensor reaches the image fixing temperature.

2 (original). The image forming apparatus according to claim 1, wherein a thermal time constant of said temperature sensor is 1/20 or more of a warm-up time necessary for the temperature of said image heating body to rise to the image fixing temperature.

3 (previously presented). The image forming apparatus according to claim 1, wherein at least part of said image heating body has electrical conductivity and said heat-producer comprises an excitation section that heats said image heating body directly by means of electromagnetic induction.

4 (previously presented). The image forming apparatus according to claim 1, wherein said heat-producer comprises:

a rotatable heat-producing member at least part of which has electrical conductivity and is in contact with said image heating body and heats said image heating body indirectly; and

an excitator that heats said heat-producing member by means of electromagnetic induction.

5 (previously presented). The image forming apparatus according to claim 1, wherein

said image forming operation controller starts the image forming operation by said image former based on a timing at which the temperature of said image heating body reaches a predetermined temperature, or timing at which elapsed time after a start of operation of said heat-fixing apparatus reaches a predetermined time, whichever timing is earlier.

6 (previously presented). The image forming apparatus according to claim 1, wherein said image forming operation controller starts the image forming operation of said image former only when the temperature of said image heating body following an elapse of a predetermined time after a start of an operation of said heat-fixing apparatus is a temperature within a predetermined range.

7 (previously presented). The image forming apparatus according to claim 1, further comprising a voltage detector that detects a power supply voltage and wherein said image forming operation controller starts the image forming operation of said image former following an elapse of a predetermined time after a start of operation of said heat-fixing apparatus only when the power supply voltage detected by said voltage detector at a time of a start of the image forming operation of said image former is greater than or equal to a predetermined voltage.

8 (previously presented). The image forming apparatus according to claim 1, further comprising a voltage detector that detects a power supply voltage and wherein said image forming operation controller changes a predetermined time until the image forming operation of said image former is started after said heat-fixing apparatus starts operating in accordance with the power supply voltage detected by said voltage detector at a time of a start of the image forming operation of said image former.

9 (previously presented). The image forming apparatus according to claim 1, further comprising an environmental temperature sensor that detects an environmental temperature of a body of said image forming apparatus and wherein said image forming operation controller starts

the image forming operation of said image former following an elapse of a predetermined time after a start of operation of said heat-fixing apparatus only when the environmental temperature detected by said environmental temperature sensor at a time of a start of the image forming operation of said image former is greater than or equal to a preset predetermined temperature.

10 (previously presented). The image forming apparatus according to claim 1, further comprising an environmental temperature sensor that detects an environmental temperature of a body of said image forming apparatus, wherein said image forming operation controller changes a predetermined time until the image forming operation of said image former is started after said heat-fixing apparatus starts operating in accordance with the environmental temperature detected by said environmental temperature sensor at a time of a start of the image forming operation of said image former.

11 (previously presented). The image forming apparatus according to claim 1, wherein said image forming operation controller changes a predetermined time until the image forming operation of said image former is started after said heat-fixing apparatus starts operating in accordance with a processing speed at a time of the image forming operation of said image former.

12 (previously presented). The image forming apparatus according to claim 1, wherein said calorific value controller controls the calorific value of said heat-producing section, based on the temperature detected by said temperature sensor, so that the temperature of said image

heating body is maintained at the image fixing temperature suitable for heat-fixing the unfixed toner image onto plain paper used as the recording medium.

13 (original). The image forming apparatus according to claim 1, wherein said image heating body is configured as a belt-shaped member.

14 (original). The image forming apparatus according to claim 1, wherein said temperature sensor comprises a temperature measuring element that detects a temperature of said image heating body, and a nonmetallic elastic body that supports said temperature measuring element and is in contact with said image heating body at low pressure.

15 (original). The image forming apparatus according to claim 14, wherein said elastic body is a sponge.

16 (original). The image forming apparatus according to claim 14, wherein said temperature measuring element is a thermistor.

17 (currently amended). An image forming method, comprising:

forming and holding an unfixed toner image on a recording medium fed to an image forming area; and

heating the recording medium transported from the image forming area to a predetermined fixing area and fixing the unfixed toner image onto the recording medium, wherein

said heating comprises:

using [[a]] an image heating body to heat the unfixed toner image on the recording medium;

using a heat-producer to heat the image heating body;

detecting a temperature of the image heating body; and

controlling a calorific value of the heat-producer based on the detected temperature so that the temperature the image heating body is maintained at an image fixing temperature suitable for heat-fixing the unfixed toner image onto the recording medium; and wherein

said image forming method further comprises controlling an image forming operation so that heat-fixing of the unfixed toner image onto the recording medium is started at a predetermined timing before the detected temperature reaches said image fixing temperature.